

## EAST Search History

| Ref # | Hits  | Search Query   | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|-------|--|---|------------------|---------|------------------|
| L4    | 391   | (320/104).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/07/23 10:05 |
| L5    | 795   | (320/132).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/07/23 10:05 |
| L6    | 610   | (324/427).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/07/23 10:05 |
| L7    | 98    | (L4 or L5 or L6) and<br>@pd>"20061124"   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/23 10:08 |
| L11   | 137   | battery and charg\$3 and display<br>and (micro\$1processor or<br>micro\$1computer or C\$1P\$1U\$1)<br>and ((test\$3 or monitor\$3 or<br>detect\$3 or sens\$3 or measur\$3)<br>with battery) and ((test\$3 or<br>detect\$3) with starter) and (vehicle<br>or car or automobile) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/23 10:08 |
| L12   | 50869 | battery and (micro\$1processor or<br>micro\$1computer or C\$1P\$1U\$1)<br>and charg\$3   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/23 10:08 |
| L13   | 5199  | L12 and ("320"/\$.ccls. or "324"/\$.<br>ccls. or "364"/\$.ccls. or "307"/\$.<br>ccls.)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/23 10:08 |
| L14   | 95    | L13 and (surface with charge with<br>(sens\$3 or determin\$5 or measur\$3<br>or detect\$3 or monitor\$3))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/23 10:08 |
| L15   | 18    | (L11 or L14) and @pd>"20061124"  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2007/07/23 10:08 |

## EAST Search History

|     |     |   |   |    |     |                  |
|-----|-----|---|---|----|-----|------------------|
| S1  | 117 | battery and charg\$3 and display and (micro\$1processor or micro\$1computer or C\$1P\$1U\$1) and ((test\$3 or monitor\$3 or detect\$3 or sens\$3 or measur\$3) with battery) and ((test\$3 or detect\$3) with starter) and (vehicle or car or automobile) | US-PGPUB;<br>USPAT;<br>USOCR; ...<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/12/06 15:51 |
| S2  | 19  | S1 and conductance and resistance and impedance and admittance  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT     | OR | ON  | 2006/10/15 20:18 |
| S3  | 68  | S1 and cranking   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT     | OR | ON  | 2006/10/15 20:18 |
| S4  | 31  | S1 and (bad with (battery or cell))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT     | OR | ON  | 2006/10/15 20:19 |
| S5  | 59  | S1 and (idle or quiescent or (no with load))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT     | OR | ON  | 2006/11/15 08:54 |
| S6  | 87  | S1 and temperature  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT     | OR | ON  | 2006/10/15 20:20 |
| S7  | 11  | S1 and (surface with charge)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT     | OR | ON  | 2006/10/15 20:21 |
| S8  | 6   | S2 and S3 and S4 and S5 and S6 and S7   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT     | OR | ON  | 2006/10/15 20:21 |
| S10 | 816 | (324/426).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT     | OR | OFF | 2006/11/16 15:18 |

## EAST Search History

|     |    |   |   |    |     |                  |
|-----|----|---|---|----|-----|------------------|
| S11 | 9  | ("6885195") or ("6445158") or ("6351102") or ("6091245") or ("6051976")).PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/11/24 16:10 |
| S12 | 11 | (micro\$1processor or micro\$1computer or CPU or micro\$1controller) and (battery or accumulator) and (test\$3 or measur\$3 or sens\$3 or monitor\$3) and starter and display and (conductance or resistance or impedance or admittance) and ((cranking with voltage) or CCV) and (idl\$3 or quiescent or parked) and load and temperature and (capacity or SOC or state\$1of\$1charge) and rating and (faulty or bad or replace) and (good or recharge or fully) and (analog\$1to\$1digital or A\$1D) and (amplifier or boost or flyback) and (vehicle or car or automobile or transportation) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/11/24 16:21 |

# EAST Search History

|   |     |   |                              |    |    |                  |
|---|-----|---|------------------------------|----|----|------------------|
| S13   | 279 | ("2514745"   "3356936"  <br>"3562634"   "3593099"   "3607673"<br>  "3676770"   "3729989"  <br>"3753094"   "3808522"   "3811089"<br>  "3873911"   "3876931"  <br>"3886443"   "3889248"   "3906329"<br>  "3909708"   "3936744"  <br>"3946299"   "3947757"   "3969667"<br>  "3979664"   "3984762"  <br>"3984768"   "3989544"   "4008619"<br>  "4024953"   "4053824"  <br>"4070624"   "4086531"   "4112351"<br>  "4114083"   "4126874"  <br>"4178546"   "4193025"   "4207611"<br>  "4217645"   "4315204"  <br>"4316185"   "4322685"   "4363407"<br>  "4369407"   "4379989"  <br>"4379990"   "4390828"   "4392101"<br>  "4396880"   "4408157"  <br>"4412169"   "4423378"   "4423379"<br>  "4424491"   "4459548"  <br>"4514694"   "4520353"   "4633418"<br>  "4659977"   "4663580"  <br>"4667143"   "4667279"   "4678998"<br>  "4679000"   "4680528"  <br>"4697134"   "4707795"   "4709202"<br>  "4710861"   "4719428"  <br>"4743855"   "4745349"   "4816768"<br>  "4820966"   "4825170"  <br>"4847547"   "4849700"   "4876495"<br>  "4881038"   "4912416"  <br>"4913116"   "4929931"   "4931738"<br>  "4937528"   "4947124"  <br>"4956597"   "4968941"   "4968942"<br>  "5004979"   "5032825"  <br>"5047722"   "5087881"   "5126675"<br>  "5140269"   "5144218"  <br>"5144248"   "5160881"   "5170124"<br>  "5179335"   "5204611"  <br>"5214370"   "5214385"   "5241275"<br>  "5254952"   "5266880"  <br>"5281919"   "5281920"   "5295078"<br>  "5298797"   "5300874"  <br>"5302902"   "5315287"   "5321626"<br>  "5331268"   "5336993"  <br>"5338515"   "5339018"   "5343380"<br>  "5347163"   "5352968"  <br>"5365160"   "5365453"   "5381096"<br>  "5412323"   "5426371"  <br>"5426416"   "5432426"  <br>"5434495").PN. OR ("5435185"  <br>"5442274"   "5445026"   "5449996"<br>  "5449997"   "5451881"  <br>"5457377"   "5469043"   "5485090"<br>  "5488300"   "5519383"  <br>"5528148"   "5537967"   "5546317"<br>"5548273"   "5550485"  <br>"5561380"   "5562501"   "5572136"<br>"5574355"   "5583416" | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/11/24 16:26 |
| 7/23/2007 11:01:39 AM<br>C:\Documents and Settings\apigou\My Documents\FAST\Workspaces\10791141.wsp |     |   |                              |    |    | Page 4           |

## EAST Search History

|     |    |  |                              |    |    |                  |
|-----|----|--|------------------------------|----|----|------------------|
| S14 | 56 | ("4937528"   "5321627"  <br>"5381096"   "5404106"   "5635842"<br>  "5672951"   "5680050"  <br>"5705929"   "5721688"   "5744962"<br>  "5751217"   "5761072"  <br>"5828218"   "5900734"   "6091228"<br>  "6097193").PN. OR ("6424157").<br>URPN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/11/24 16:27 |
|-----|----|--|------------------------------|----|----|------------------|

# EAST Search History

|                       |     |   |                              |    |    |                  |
|-----------------------|-----|---|------------------------------|----|----|------------------|
| S15                   | 256 | ("2514745"   "3356936"  <br>"3562634"   "3593099"   "3607673"<br>  "3676770"   "3729989"  <br>"3753094"   "3808522"   "3811089"<br>  "3873911"   "3876931"  <br>"3886443"   "3889248"   "3906329"<br>  "3909708"   "3936744"  <br>"3946299"   "3947757"   "3969667"<br>  "3979664"   "3984762"  <br>"3984768"   "3989544"   "4008619"<br>  "4024953"   "4053824"  <br>"4070624"   "4086531"   "4112351"<br>  "4114083"   "4126874"  <br>"4178546"   "4193025"   "4207611"<br>  "4217645"   "4315204"  <br>"4316185"   "4322685"   "4363407"<br>  "4369407"   "4379990"  <br>"4390828"   "4392101"   "4396880"<br>  "4408157"   "4412169"  <br>"4423378"   "4423379"   "4424491"<br>  "4459548"   "4514694"  <br>"4520353"   "4633418"   "4659977"<br>  "4667279"   "4678998"  <br>"4679000"   "4697134"   "4707795"<br>  "4709202"   "4710861"  <br>"4719428"   "4743855"   "4745349"<br>  "4816756"   "4816768"  <br>"4820966"   "4825170"   "4849700"<br>  "4876495"   "4881038"  <br>"4912416"   "4913116"   "4929931"<br>  "4931738"   "4937528"  <br>"4947124"   "4956597"   "4968941"<br>  "4968942"   "5004979"  <br>"5032825"   "5047722"   "5087881"<br>  "5126675"   "5140269"  <br>"5144218"   "5144248"   "5160881"<br>  "5170124"   "5179335"  <br>"5204611"   "5214370"   "5214385"<br>  "5241275"   "5254952"  <br>"5266880"   "5281919"   "5281920"<br>  "5295078"   "5298797"  <br>"5300874"   "5302902"   "5315287"<br>  "5321626"   "5331268"  <br>"5336993"   "5338515"   "5339018"<br>  "5343380"   "5347163"  <br>"5352968"   "5365160"   "5365453"<br>  "5381096"   "5412323"  <br>"5426371"   "5426416"   "5432426"<br>  "5434495"   "5442274"  <br>"5449996"   "5449997"  <br>"5451881").PN. OR ("5457377"  <br>"5469043"   "5485090"   "5488300"<br>  "5519383"   "5528148"  <br>"5537967"   "5546317"   "5548273"<br>  "5550485"   "5561380"  <br>"5562501"   "5572136"   "5574355"<br>  "5583416"   "5585728"  <br>"5589757"   "5592093"   "5596260"<br>  "5598008"   "5607467" | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/11/24 16:27 |
| 7/23/2007 11:01:39 AM |     | C:\Documents and Settings\anindush\My Documents\EAST\Workspaces\10791141.wsp  |                              |    |    | Page 6           |

## EAST Search History

|     |     |   |   |    |     |                  |
|-----|-----|---|---|----|-----|------------------|
| S16 | 104 | ("3673588"   "4247813"   "4258421"   "4310888"   "4316134"   "4334425"   "4342022"   "4402054"   "4628872"   "4678998"   "4757463"   "4843575"   "4891971"   "4929931"   "4937528"   "4939502"   "4965549"   "4978291"   "4990885"   "5003478"   "5003479"   "5012421"   "5034889"   "5056023"   "5063513"   "5072391"   "5091856").PN. OR ("5450321").URPN.  | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON  | 2006/11/24 16:32 |
| S17 | 357 | (320/104).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/11/24 16:33 |
| S18 | 732 | (320/132).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/11/24 16:55 |
| S20 | 38  | ((("5369364") or ("6016047") or ("6215275") or ("6449726") or ("6777945") or ("20030194672") or ("20030036909") or ("RE37677") or ("6091238") or ("5780974") or ("5912534") or ("5614788") or ("5661368") or ("5081565") or ("20040049361") or ("20040051533") or ("20040054503") or ("4926330") or ("4949046") or ("5321627") or ("5872453") or ("6037778") or ("6061638") or ("6275008") or ("6359442") or ("6384608") or ("6388448") or ("6396278") or ("6570385") or ("6629054") or ("D442503") or ("20020030495") or ("4352067") or ("4360780") or ("4723656") or ("4874679") or ("5432025") or ("5707015")).PN. | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | OFF | 2006/11/24 17:26 |

## EAST Search History

|     |    |  |                              |    |     |                  |
|-----|----|--|------------------------------|----|-----|------------------|
| S21 | 37 | ((("2514745") or ("3593099") or ("3607673") or ("3676770") or ("3729989") or ("3753094") or ("3808522") or ("3811089") or ("3873911") or ("3886443") or ("3889248") or ("3906329") or ("3909708") or ("3936744") or ("3946299") or ("3947757") or ("3969667") or ("3979664") or ("3984762") or ("3984768") or ("4008619") or ("4053824") or ("4070624") or ("4086531") or ("4112351") or ("4114083") or ("4126874") or ("4178546") or ("4193025") or ("4207611") or ("4315204") or ("4316185") or ("4322685") or ("4363407") or ("4369407") or ("4412169"))).PN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/11/24 17:50 |
| S22 | 67 | ((("4390828") or ("4392101") or ("4396880") or ("4408157") or ("4423378") or ("4423379") or ("4424491") or ("4459548") or ("4514694") or ("4520353") or ("4667279") or ("4678998") or ("4679000") or ("4697134") or ("4707795") or ("4709202") or ("4710861") or ("4719428") or ("4743855") or ("4816768") or ("4820966") or ("4825170") or ("4849700") or ("4881038") or ("4912416") or ("4929931") or ("4931738") or ("4947124") or ("4956597") or ("4968941") or ("5004979") or ("5032825") or ("5047722") or ("5087881") or ("5126675") or ("5140269") or ("5144248") or ("5170124") or ("5204611") or ("5214370") or ("5214385") or ("5241275") or ("5254952") or ("5281919") or ("5281920") or ("5295078") or ("5298797") or ("5300874") or ("5302902") or ("5331268") or ("5336993") or ("5352968") or ("5343380") or ("5365160") or ("5365453") or ("5381096") or ("5426371") or ("5432426") or ("5434495") or ("5442274") or ("5457377") or ("5449996") or ("5449997") or ("5485090") or ("5519383") or ("5528148") or ("5550485") or ("5561380"))).PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/11/24 18:15 |



## EAST Search History

|     |    |   |                              |    |     |                  |
|-----|----|---|------------------------------|----|-----|------------------|
| S23 | 57 | (("5562501") or ("5572136") or ("5574355") or ("5585728") or ("5592093") or ("5596260") or ("5598098") or ("5602462") or ("5606242") or ("5621298") or ("5642031") or ("5650937") or ("5652501") or ("5675234") or ("5677077") or ("5699050") or ("5701089") or ("5717336") or ("5757192") or ("5773978") or ("5789899") or ("5793359") or ("5821756") or ("5831435") or ("5872443") or ("5914605") or ("5945829") or ("3356936") or ("5488300") or ("6002238") or ("6037777") or ("6051976") or ("6081098") or ("6091245") or ("6104167") or ("6137269") or ("3562634") or ("4379990") or ("5144218") or ("5315287") or ("5469043") or ("5546317") or ("5583416") or ("5589757") or ("5656920") or ("5710503") or ("5760587") or ("5808469") or ("6008652") or ("6009369") or ("6031354") or ("6037751") or ("6072299") or ("6094033") or ("6163156") or ("6172483") or ("6172505")).PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/11/25 18:09 |
|-----|----|---|------------------------------|----|-----|------------------|

## EAST Search History

|     |    |  |                              |    |     |                  |
|-----|----|--|------------------------------|----|-----|------------------|
| S24 | 74 | (("3989544") or ("4745349") or ("4876495") or ("4937528") or ("4968942") or ("5179335") or ("5266880") or ("5451881") or ("5705929") or ("5717937") or ("5862515") or ("5895440") or ("5929609") or ("6072300") or ("4659977") or ("4913116") or ("5160881") or ("5338515") or ("5537967") or ("5548273") or ("5747909") or ("6114834") or ("6150793") or ("3876931") or ("5347163") or ("5939861") or ("5339018") or ("5412323") or ("5426416") or ("5825174") or ("5939855") or ("5254952") or ("4217645") or ("4633418") or ("5321626") or ("5969625") or ("6222369") or ("6225808") or ("6249124") or ("6259254") or ("6262563") or ("6294896") or ("6294897") or ("4379989") or ("4680528") or ("5633985") or ("5739667") or ("4024953") or ("6250973") or ("6254438") or ("6304087") or ("6310481") or ("6313607") or ("6313608") or ("6316914") or ("5435185") or ("5445026") or ("4667143") or ("4847547") or ("5574355") or ("4663580") or ("6323650") or ("6329793") or ("6331762") or ("6332113") or ("4297639") or ("5653659") or ("6161640") or ("4351405") or ("6359441") or ("4047091") or ("5653659") or ("5637978") or ("5095223") or ("5194799") or ("5754417")).PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/11/25 19:02 |
|-----|----|--|------------------------------|----|-----|------------------|

## EAST Search History

|     |    |  |                              |    |     |                  |
|-----|----|--|------------------------------|----|-----|------------------|
| S25 | 51 | (("5818234") or ("6140797") or ("6181545") or ("6346795") or ("6347958") or ("6351102") or ("6359441") or ("6363303") or ("5037778") or ("6144185") or ("5711648") or ("5927938") or ("5951229") or ("5961561") or ("5961604") or ("6236332") or ("6351102") or ("5821757") or ("6167349") or ("4665370") or ("4361809") or ("6392414") or ("6417669") or ("6424158") or ("6441585") or ("6445158") or ("6384608") or ("6388448") or ("6307349") or ("6411098") or ("6456045") or ("6466025") or ("6466026") or ("4564798") or ("5563496") or ("5796239") or ("4888716") or ("6495990") or ("4385269") or ("4686442") or ("6061638") or ("6359442") or ("5541489") or ("6424157") or ("6534993") or ("6544078") or ("6556019") or ("6566883") or ("6586941") or ("6597150") or ("20020171428") or ("6263268")).<br>PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/11/25 19:05 |
|-----|----|--|------------------------------|----|-----|------------------|

## EAST Search History

|     |     |   |   |    |     |                  |
|-----|-----|---|---|----|-----|------------------|
| S26 | 70  | (("5410754") or ("5654623") or ("6055468") or ("20030025481") or ("5313152") or ("20030184306") or ("20040000891") or ("3750011") or ("5159272") or ("5325041") or ("6526361") or ("6667624") or ("20020010558") or ("20020176010") or ("3652341") or ("5747967") or ("6628011") or ("5780980") or ("5412308") or ("6222342") or ("6679212") or ("5850113") or ("6242887") or ("6238253") or ("4056764") or ("6005759") or ("6064372") or ("5323337") or ("5978805") or ("6600815") or ("4933845") or ("6618644") or ("5982138") or ("4620767") or ("4934957") or ("5772468") or ("5108320") or ("5453027") or ("5865638") or ("3796124") or ("4280457") or ("4160916") or ("6356042") or ("6259170") or ("6081109") or ("6031368") or ("6211651") or ("6046514") or ("6531848") or ("4023882") or ("2000665") or ("6158000") or ("5745044") or ("5578915") or ("5592094") or ("6275008") or ("5872453") or ("5321627") or ("4949046") or ("4926330") or ("20020050163") or ("20030184262") or ("20040000891") or ("20040000590") or ("20040000893") or ("20040000913") or ("20040000915") or ("20040002824") or ("20040002825") or ("20040002836"))).PN. | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | OFF | 2006/11/25 19:11 |
| S29 | 10  | (("6215275") or ("5831435") or ("6016047") or ("6449726") or ("20030184262"))).PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/12/05 17:42 |
| S30 | 121 | battery and charg\$3 and display and (micro\$1processor or micro\$1computer or C\$1P\$1U\$1) and ((test\$3 or monitor\$3 or detect\$3 or sens\$3 or measur\$3) with battery) and ((test\$3 or detect\$3) with starter) and (vehicle or car or automobile)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/12/06 15:52 |

## EAST Search History

|     |    |  |   |    |     |                  |
|-----|----|--|---|----|-----|------------------|
| S31 | 9  | ((("6885195") or ("6445158") or ("6351102") or ("6091245") or ("6051976"))).PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/12/06 15:52 |
| S32 | 38 | ((("5369364") or ("6016047") or ("6215275") or ("6449726") or ("6777945") or ("20030194672") or ("20030036909") or ("RE37677") or ("6091238") or ("5780974") or ("5912534") or ("5614788") or ("5661368") or ("5081565") or ("20040049361") or ("20040051533") or ("20040054503") or ("4926330") or ("4949046") or ("5321627") or ("5872453") or ("6037778") or ("6061638") or ("6275008") or ("6359442") or ("6384608") or ("6388448") or ("6396278") or ("6570385") or ("6629054") or ("D442503") or ("20020030495") or ("4352067") or ("4360780") or ("4723656") or ("4874679") or ("5432025") or ("5707015"))).PN. | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | OFF | 2006/12/06 15:52 |
| S33 | 37 | ((("2514745") or ("3593099") or ("3607673") or ("3676770") or ("3729989") or ("3753094") or ("3808522") or ("3811089") or ("3873911") or ("3886443") or ("3889248") or ("3906329") or ("3909708") or ("3936744") or ("3946299") or ("3947757") or ("3969667") or ("3979664") or ("3984762") or ("3984768") or ("4008619") or ("4053824") or ("4070624") or ("4086531") or ("4112351") or ("4114083") or ("4126874") or ("4178546") or ("4193025") or ("4207611") or ("4315204") or ("4316185") or ("4322685") or ("4363407") or ("4369407") or ("4412169"))).PN.   | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | OFF | 2006/12/06 15:52 |

## EAST Search History

|     |    |  |                              |    |     |                  |
|-----|----|--|------------------------------|----|-----|------------------|
| S34 | 67 | (("4390828") or ("4392101") or ("4396880") or ("4408157") or ("4423378") or ("4423379") or ("4424491") or ("4459548") or ("4514694") or ("4520353") or ("4667279") or ("4678998") or ("4679000") or ("4697134") or ("4707795") or ("4709202") or ("4710861") or ("4719428") or ("4743855") or ("4816768") or ("4820966") or ("4825170") or ("4849700") or ("4881038") or ("4912416") or ("4929931") or ("4931738") or ("4947124") or ("4956597") or ("4968941") or ("5004979") or ("5032825") or ("5047722") or ("5087881") or ("5126675") or ("5140269") or ("5144248") or ("5170124") or ("5204611") or ("5214370") or ("5214385") or ("5241275") or ("5254952") or ("5281919") or ("5281920") or ("5295078") or ("5298797") or ("5300874") or ("5302902") or ("5331268") or ("5336993") or ("5352968") or ("5343380") or ("5365160") or ("5365453") or ("5381096") or ("5426371") or ("5432426") or ("5434495") or ("5442274") or ("5457377") or ("5449996") or ("5449997") or ("5485090") or ("5519383") or ("5528148") or ("5550485") or ("5561380")).PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/12/06 15:52 |
|-----|----|--|------------------------------|----|-----|------------------|

## EAST Search History

|     |    |   |                              |    |     |                  |
|-----|----|---|------------------------------|----|-----|------------------|
| S35 | 57 | (("5562501") or ("5572136") or ("5574355") or ("5585728") or ("5592093") or ("5596260") or ("5598098") or ("5602462") or ("5606242") or ("5621298") or ("5642031") or ("5650937") or ("5652501") or ("5675234") or ("5677077") or ("5699050") or ("5701089") or ("5717336") or ("5757192") or ("5773978") or ("5789899") or ("5793359") or ("5821756") or ("5831435") or ("5872443") or ("5914605") or ("5945829") or ("3356936") or ("5488300") or ("6002238") or ("6037777") or ("6051976") or ("6081098") or ("6091245") or ("6104167") or ("6137269") or ("3562634") or ("4379990") or ("5144218") or ("5315287") or ("5469043") or ("5546317") or ("5583416") or ("5589757") or ("5656920") or ("5710503") or ("5760587") or ("5808469") or ("6008652") or ("6009369") or ("6031354") or ("6037751") or ("6072299") or ("6094033") or ("6163156") or ("6172483") or ("6172505")).PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/12/06 15:52 |
|-----|----|---|------------------------------|----|-----|------------------|

## EAST Search History

|     |    |  |                              |    |     |                  |
|-----|----|--|------------------------------|----|-----|------------------|
| S36 | 74 | (("3989544") or ("4745349") or ("4876495") or ("4937528") or ("4968942") or ("5179335") or ("5266880") or ("5451881") or ("5705929") or ("5717937") or ("5862515") or ("5895440") or ("5929609") or ("6072300") or ("4659977") or ("4913116") or ("5160881") or ("5338515") or ("5537967") or ("5548273") or ("5747909") or ("6114834") or ("6150793") or ("3876931") or ("5347163") or ("5939861") or ("5339018") or ("5412323") or ("5426416") or ("5825174") or ("5939855") or ("5254952") or ("4217645") or ("4633418") or ("5321626") or ("5969625") or ("6222369") or ("6225808") or ("6249124") or ("6259254") or ("6262563") or ("6294896") or ("6294897") or ("4379989") or ("4680528") or ("5633985") or ("5739667") or ("4024953") or ("6250973") or ("6254438") or ("6304087") or ("6310481") or ("6313607") or ("6313608") or ("6316914") or ("5435185") or ("5445026") or ("4667143") or ("4847547") or ("5574355") or ("4663580") or ("6323650") or ("6329793") or ("6331762") or ("6332113") or ("4297639") or ("5653659") or ("6161640") or ("4351405") or ("6359441") or ("4047091") or ("5653659") or ("5637978") or ("5095223") or ("5194799") or ("5754417")).PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/12/06-15:52 |
|-----|----|--|------------------------------|----|-----|------------------|



## EAST Search History

|     |    |  |                              |    |     |                  |
|-----|----|--|------------------------------|----|-----|------------------|
| S37 | 51 | (("5818234") or ("6140797") or ("6181545") or ("6346795") or ("6347958") or ("6351102") or ("6359441") or ("6363303") or ("5037778") or ("6144185") or ("5711648") or ("5927938") or ("5951229") or ("5961561") or ("5961604") or ("6236332") or ("6351102") or ("5821757") or ("6167349") or ("4665370") or ("4361809") or ("6392414") or ("6417669") or ("6424158") or ("6441585") or ("6445158") or ("6384608") or ("6388448") or ("6307349") or ("6411098") or ("6456045") or ("6466025") or ("6466026") or ("4564798") or ("5563496") or ("5796239") or ("4888716") or ("6495990") or ("4385269") or ("4686442") or ("6061638") or ("6359442") or ("5541489") or ("6424157") or ("6534993") or ("6544078") or ("6556019") or ("6566883") or ("6586941") or ("6597150") or ("20020171428") or ("6263268")).<br>PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/12/06 15:52 |
|-----|----|--|------------------------------|----|-----|------------------|

## EAST Search History

|     |    |  |   |    |     |                  |
|-----|----|--|---|----|-----|------------------|
| S38 | 70 | (("5410754") or ("5654623") or ("6055468") or ("20030025481") or ("5313152") or ("20030184306") or ("20040000891") or ("3750011") or ("5159272") or ("5325041") or ("6526361") or ("6667624") or ("20020010558") or ("20020176010") or ("3652341") or ("5747967") or ("6628011") or ("5780980") or ("5412308") or ("6222342") or ("6679212") or ("5850113") or ("6242887") or ("6238253") or ("4056764") or ("6005759") or ("6064372") or ("5323337") or ("5978805") or ("6600815") or ("4933845") or ("6618644") or ("5982138") or ("4620767") or ("4934957") or ("5772468") or ("5108320") or ("5453027") or ("5865638") or ("3796124") or ("4280457") or ("4160916") or ("6356042") or ("6259170") or ("6081109") or ("6031368") or ("6211651") or ("6046514") or ("6531848") or ("4023882") or ("2000665") or ("6158000") or ("5745044") or ("5578915") or ("5592094") or ("6275008") or ("5872453") or ("5321627") or ("4949046") or ("4926330") or ("20020050163") or ("20030184262") or ("20040000891") or ("20040000590") or ("20040000893") or ("20040000913") or ("20040000915") or ("20040002824") or ("20040002825") or ("20040002836")).PN. | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | OFF | 2006/12/06 15:52 |
| S39 | 10 | ((("6215275") or ("5831435") or ("6016047") or ("6449726") or ("20030184262"))).PN.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/12/06 15:52 |
| S40 | 18 | (S31 or S34 or S33 or S32 or S36 or S37 or S38 or S35 or S39) and S30  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/12/06 15:55 |

## EAST Search History

|     |     |   |   |    |     |                  |
|-----|-----|---|---|----|-----|------------------|
| S41 | 56  | ("4937528"   "5321627"   "5381096"   "5404106"   "5635842"   "5672951"   "5680050"   "5705929"   "5721688"   "5744962"   "5751217"   "5761072"   "5828218"   "5900734"   "6091228"   "6097193").PN. OR ("6424157").URPN.  | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON  | 2006/12/06 19:03 |
| S42 | 30  | ("4178546"   "4926330"   "4967143"   "5181858"   "5281919"   "5649001"   "6172505"   "6351102").PN. OR ("6570385").URPN.  | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON  | 2006/12/06 19:04 |
| S43 | 107 | ("2084086"   "3848181"   "3876931"   "4295097"   "4352067"   "4423379"   "4459548"   "4613822"   "4767977"   "4816768"   "4914383"   "4929931").PN. OR ("5254952").URPN.  | US-PGPUB;<br>USPAT;<br>USOCR                          | OR | ON  | 2006/12/06 19:04 |
| S44 | 606 | (324/427).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/12/06 19:19 |
| S45 | 16  | (US-20050017726-\$ or US-20040054503-\$).did. or (US-6051976-\$ or US-5426371-\$ or US-6445158-\$ or US-6351102-\$ or US-5450321-\$ or US-6424157-\$ or US-5831435-\$ or US-6215275-\$ or US-6777945-\$ or US-6570385-\$ or US-5254952-\$ or US-6363303-\$ or US-5701089-\$ or US-D354244-\$).did.                                  | US-PGPUB;<br>USPAT                                    | OR | ON  | 2006/12/07 11:45 |
| S47 | 1   | S45 and display and (micro\$1processor or micro\$1computer or C\$1P\$1U\$1 or micro\$1controller) and battery and starter and (charging with system) and (rating or CCA or crank\$3) and (conductance or resistance or impedance or admittance) and (good or full\$1) and re\$1charge and (bad or replace) and load and temperature | US-PGPUB;<br>USPAT                                    | OR | ON  | 2006/12/07 11:52 |

## EAST Search History

|     |    |  |   |    |     |                  |
|-----|----|--|---|----|-----|------------------|
| S48 | 10 | S45 and display and (micro\$1processor or micro\$1computer or C\$1P\$1U\$1 or micro\$1controller) and battery and starter and (charging with system) and (rating or CCA or crank\$3) and (conductance or resistance or impedance or admittance) and load and temperature | US-PGPUB; USPAT                           | OR | ON  | 2006/12/07 11:52 |
| S49 | 2  | S48 and (idle or quiescent) and (surface with charge)  | US-PGPUB; USPAT                           | OR | ON  | 2006/12/07 11:54 |
| S50 | 8  | S48 and ripple   | US-PGPUB; USPAT                           | OR | ON  | 2006/12/07 11:56 |
| S51 | 9  | S48 and (idle or quiescent)  | US-PGPUB; USPAT                           | OR | ON  | 2006/12/07 11:59 |
| S52 | 2  | S48 and (surface with charge)  | US-PGPUB; USPAT                           | OR | ON  | 2006/12/07 11:55 |
| S53 | 8  | S50 and S51  | US-PGPUB; USPAT                           | OR | ON  | 2006/12/07 11:55 |
| S54 | 6  | S51 and (portable or hand\$1held)  | US-PGPUB; USPAT                           | OR | ON  | 2006/12/07 12:02 |
| S55 | 30 | ("4178546"   "4926330"   "4967143"   "5181858"   "5281919"   "5649001"   "6172505"   "6351102").PN. OR ("6570385").URPN.   | US-PGPUB; USPAT; USOCR                    | OR | ON  | 2006/12/07 12:01 |
| S56 | 6  | S54 and ripple   | US-PGPUB; USPAT                           | OR | ON  | 2006/12/07 12:02 |
| S57 | 5  | ((("6885195") or ("6445158") or ("6351102") or ("6091245") or ("6051976"))).PN.  | US-PGPUB; USPAT; USOCR                    | OR | OFF | 2006/12/07 12:46 |
| S58 | 2  | S57 and (display and microprocessor and starter and (charging with system))".clm"  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON  | 2006/12/07 12:47 |

## EAST Search History

|     |       |  |   |    |    |                  |
|-----|-------|--|---|----|----|------------------|
| S59 | 0     | battery and (micro\$1processor or micro\$1computer or C\$1P\$1U\$1) and charg\$3 and (temperature with input with user) and ((AC or (alternating with current)) with ripple with voltage) and (surface with charge with (sens\$3 or determin\$5 or measur\$3 or detect\$3 or monitor\$3)) and (head\$1lights with (prompt or command or notify) with ((switch or turn) with on)) and (print\$3 with output) and (diode with ripple with voltage) and ((measur\$3 or detect\$3 or sens\$3 or determin\$3 or monitor\$3) with ((AC and DC) with voltage)) and (amplifier with battery with capacitor) and (voltage with (scaling or scaled or scale)) and ((diesel with engine) same ((glow with plug) with (warm\$1up or warm or heat\$1up or heat))) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/14 13:25 |
| S60 | 1     | battery and (micro\$1processor or micro\$1computer or C\$1P\$1U\$1) and charg\$3 and (temperature with input with user) and ((AC or (alternating with current)) with ripple with voltage) and (surface with charge with (sens\$3 or determin\$5 or measur\$3 or detect\$3 or monitor\$3))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/14 13:28 |
| S61 | 46624 | battery and (micro\$1processor or micro\$1computer or C\$1P\$1U\$1) and charg\$3   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/14 13:31 |
| S62 | 4895  | S61 and ("320"/\$.ccls. or "324"/\$.ccls. or "364"/\$.ccls. or "307"/\$.ccls.)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/14 13:32 |
| S63 | 7     | S62 and ((AC or (alternating with current)) with ripple with voltage) and (surface with charge with (sens\$3 or determin\$5 or measur\$3 or detect\$3 or monitor\$3))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/14 13:34 |
| S64 | 6     | S63 and ((measur\$3 or detect\$3 or sens\$3 or determin\$3 or monitor\$3) with ((AC and DC) with voltage))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/14 13:33 |

## EAST Search History

|     |     |  |   |    |    |                  |
|-----|-----|--|---|----|----|------------------|
| S65 | 29  | S62 and ((AC or (alternating with current)) with ripple with voltage) and ((measur\$3 or detect\$3 or sens\$3 or determin\$3 or monitor\$3) with ((AC and DC) with voltage)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/14 13:45 |
| S66 | 49  | S62 and (temperature with input with user)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/14 14:49 |
| S67 | 93  | S62 and (surface with charge with (sens\$3 or determin\$5 or measur\$3 or detect\$3 or monitor\$3))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/14 14:50 |
| S68 | 7   | S67 and ((glow with plug) or (diesel with engine))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/14 14:53 |
| S69 | 109 | S62 and ((glow with plug) or (diesel with engine))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/14 14:53 |
| S70 | 9   | S62 and ((glow with plug) or glow\$1plug or (diesel with engine)) and ((warm\$1up or (warm with up)) same (indicat\$3 or detect\$3 or wait\$3))                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | ON | 2006/12/14 14:55 |